# Product datasheet Anti-nNOS/NOS1 Antibody Catalog Number: A01070-2



Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator, East Lake High-Tech Development Zone, Wuhan.

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<b>Basic Information</b>	
Product Name	Anti-nNOS/NOS1 Antibody
Gene Name	NOS1
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, FCM, ELISA
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	E.coli-derived human nNOS (neuronal)/NOS1 recombinant protein (Position: R19-E1320).
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	161 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA):1:100-1000

#### **Storage**

12 months from date of receipt, -20°C as supplied.

## **Background Information**

Nitric oxide synthase 1 (neuronal), also known as NOS1, is an enzyme that in humans is encoded by the NOS1 gene. The protein encoded by this gene belongs to the family of nitric oxide synthases, which synthesize nitric oxide from L-arginine. Nitric oxide is a reactive free radical, which acts as a biologic mediator in several processes, including neurotransmission, and antimicrobial and antitumoral activities. In the brain and peripheral nervous system, nitric oxide displays many properties of a neurotransmitter, and has been implicated in neurotoxicity associated with stroke and neurodegenerative diseases, neural regulation of smooth muscle, including peristalsis, and penile erection. This protein is ubiquitously expressed, with high level of expression in skeletal muscle. Multiple transcript variants that differ in the 5' UTR have been described for this gene but the full-length nature of these transcripts is not known. Additionally, alternatively spliced transcript variants encoding different isoforms (some testis-specific) have been found for this gene.



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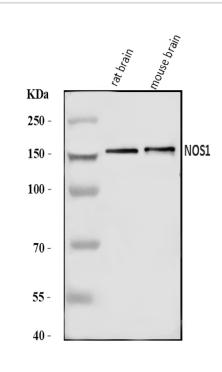
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#### Reference

Anti-nNOS/NOS1 Antibody被引用在3文献中。

### **Selected Validation Data**

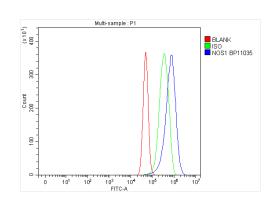


Western blot analysis of nNOS/NOS1 using anti-nNOS/NOS1 antibody (A01070-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,

Lane 2: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-nNOS/NOS1 antigen affinity purified polyclonal antibody (A01070-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for nNOS/NOS1 at approximately 161 kDa. The expected band size for nNOS/NOS1 is at 161 kDa.



Flow Cytometry analysis of U87 cells using anti-nNOS/NOS1 antibody (A01070-2).

Overlay histogram showing U87 cells stained with A01070-2 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-nNOS/NOS1 Antibody (A01070-2) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.